Validation of a Questionnaire on Asthma Knowledge, Attitudes and Practices Among Parents of Children with Asthma for the Asthma Pediatric Education Program of the Philippine Heart Center

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Background --- Asthma is a serious public health problem worldwide. A number of health – related instruments have been used to categorized knowledge, attitudes and beliefs about asthma. The purpose of this study is to determine the reliability of a standard parental asthma questionnaire based on the Asthma Pediatric Education Program (ASPEP).

Methods --- Parents of asthmatic children were included in the study. The development process began by identifying relevant content areas based on the lectures on ASPEP. An expert panel assessed the content validity of the questionnaire. The subjects were asked to answer the questions. After the initial validation, a re-test was done after two weeks using the same subjects. The original questionnaire was reformatted in such away so as to avoid familiarity bias. A final list of 10items for the knowledge domain, 10 items for the attitude domain and 10 items for the practices domain were included in the final research tool.

Results --- The overall reliability was high in the knowledge domain (Cronbach's alpha = 0.79). The overall internal reliability in the attitude domain was high (Cronbach's alpha = 0.91). In the practice domain, all subscale items were highly reliable and consistent (Cronbach's alpha = 0.92). The overall internal reliability of the questionnaire was high (Cronbach's alpha = 0.89).

Conclusion --- The questionnaire that we developed in this study is a reliable and useful tool to measure the knowledge, attitudes and practices of parents of asthmatic children. ***Phil Heart Center J 2012;16:39-49.***

Key Words: Knowledge ■ Attitudes ■ Practice ■ Asthma ■ Education Program

Asthma, one of the serious public health problems worldwide, affects people of all ages, with an estimated 300 million affected individuals, based on the GINA report.[1,2] When this is uncontrolled, it can lead to limitations on activities of daily life and is sometimes fatal. Based on the application of standardized methods to measure the prevalence of asthma and wheezing illness in children, it appears that the global prevalence of asthma ranges from 1% to 18% of the population in different countries. [2,3]

Based on the GINA report, there are social and economic factors that are integral to the understanding asthma and its care, whether it is viewed from the perspective of the individual sufferer, the health care professional, or entities that pay for health care. One of the reported social and economic consequences of this disease is absences from school. In spite of advances in the current understanding of the pathophysiology and the availability of more effective modes of therapy for this disease, there are reports of increased morbidity and mortality from asthma. Some studies attributed this to any of the following: delays in asthma diagnosis, overreliance on bronchodilators, underestimation of chronic inflammation of the airways leading to underuse of anti-inflammatory medications, and poor patient education.[4-6]

Patient education is considered as an essential component of asthma prevention and control. There has been marked improvement in the knowledge of asthma pathophysiology and technology in asthma management in the last

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two decades, thus, making asthma control seems possible. One systematic review reported that adequate treatment of asthma depends on accurate evaluation and appropriate intervention by the parent and child and timely communication with the health provider. Such parental actions are affected by their understanding of asthma management and their concerns about medications being prescribed.[7-8] Just like in any chronic disease, patient education has been demonstrated to increase compliance and self-management skills of these patients. These educational programs for the self-management of asthma in children have been developed "to improve healthcare practices, reduce morbidity, and lower the cost of care."[9] Several studies reported that these interventions were associated with modest to moderate improvement in many outcome measures, such as lung function, self-efficacy, absenteeism from school, number of days of restricted activity, number of visits to an emergency department, and possibly nights disturbed by asthma.[9,10] "Perhaps more than any other illness, asthma necessitates an ongoing partnership and communication between health care providers and the patient and family for optimal treatment to take place."[9]

Jones and Allen reported that there are a number of survey instruments that have been used to characterize knowledge, attitudes and beliefs about asthma among persons with asthma.[11] Rutichauser had noted that although there are several asthma-specific health–related quality of life (HRQOL) instruments available for use in adults for several years already, it is only recently that a number of asthma-specific HRQOL instruments have been developed for children and adolescents.[12] These instruments aim is to assess the impact asthma had on a person's daily functioning and emotional well-being.[12] An Asthma Knowledge questionnaire is helpful and reliable for determining the baseline level of asthma knowledge of parents of asthmatic children as well as to assess the efficacy of an educational intervention aiming to increase knowledge and understanding of the disease.[13]

One study published in 1999 used telephone survey to understand the residents' perception of the importance and impact of asthma, as well as their knowledge of asthma care in communities with high prevalence and mortality of asthma.[14] The survey questionnaire was developed from the existing 1997 National Asthma Education and Prevention Program (NAEPP) guidelines. Using the questionnaire, it was found out that a higher level of knowledge did not exist in families that had a member affected with asthma. This guideline include a component of "education for a partnership in asthma care," which focuses on the individual patient and encourages family involvement.[14] Programs to enhance the skills and change the practice behaviors of community-based providers are needed.

This study was conducted to determine the reliability of a standard parental asthma questionnaire based on Asthma Pediatric Education Program (ASPEP).

METHODOLOGY

The study is a validation study (cross sectional, analytical). The subjects included in the study should have met the following criteria: Parents of the children whose asthma was diagnosed by a certified pediatrician based on clinical history, physical examination and the Philippine Consensus for the Management of Childhood Asthma. Excluded were those who cannot read or speak Tagalog as the first and daily language and those with no written informed consent.

Initial Construction. The development process began by identifying relevant content areas. This was accomplished by reviewing the content of the lectures on Asthma Pediatric Education Program (ASPEP) and published literature in the area of asthma education. From these materials, core issues in asthma care and perceptions about asthma were identified. Content domains summarizing the core issues related to asthma and its management were developed. Items were

derived based on the following criteria: (1) comprehensiveness; (2) avoiding obvious redundancy: and (3) balance of domains represented. The initial Tagalog questionnaire was translated to English at the University of the Philippines. Sentro ng Wika. The final 30-items were back-translated to Tagalog at the same institute.

Assessment of Content Validity. An expert panel assessed the content validity of the questionnaire. The expert panel consists of three pediatric pulmonologist, a general pediatrician, psychologist and biostatistician. The questions included in the questionnaire were based on the lectures on Asthma Pediatric Education Program (ASPEP) of the Philippine Heart Center.

Administration of Questionnaires. The study was conducted in a Rural Health Unit and 5 barangay health centers in Rizal Province for 16 weeks. Initially, a pilot sample of 20 subjects was made to respond to the first draft of the questionnaire for establishment of face validity. The initial response led to the rephrasing of six (6) items which were perceived to be vague due to translation-grammatical re-wording. After the initial draft was corrected, this was again distributed to a new set of respondents of the same research setting.

The final 60 parent-respondents of asthmatic children were personally invited by the chief investigator and co-investigators to participate on the final phase of the study. Those who consented to participate were given complete information about the aim of the study. Patient's profile was asked personally by the investigator. Parents were given and asked to answer the questionnaires as honestly as possible and are free to ask if anything is not clear.

The questionnaire return rate for this pilot phase was 100%. After the initial validation, a re-test was done after two weeks using the same subjects. The original questionnaire was reformatted in such away so as to avoid familiarity bias. The same six questions which were previously corrected were refined as to translation and grammatical construction. (See final results of validation).

Final Draft. The initial pool of 30-items had high degree of internal consistency measures. A final list of ten (10) items for the knowledge domain, 10 items for the attitude domain and 10 items for the practices domain were included in the final research tool. No further deletions were made.

Statistical Analysis. All analyses were performed using the Statistical Package for the Social Sciences (Version 14) software. Descriptive statistics include measures of central tendency (mean and their standard deviation) for continuous variables and percentage-frequency distribution for categorical data.

Scores of knowledge items were given +2 if they were perceived correct and zero if they were wrong. Unsure responses were given a rating of 1. Each domain had subscale scores correlated within each subscale using Spearman Correlation of Ranks except for knowledge where exact scores were correlated with Pearson product moment correlation. Correlation values of equal to or more than 0.6 were considered statistically significant subscale correlation. Overall intra-class correlations were obtained. Discriminatory indices for knowledge were utilized using the standard formula.

Because of the inherent small sample size, scores were logarithmically transformed to z-scores and non-parametric analyses were compared to the parametric results. If correlation values were similar or approximate, the non-parametric results were obtained. Item analysis was done for all questionnaire items and subscales. Internal consistency was expressed using Cronbach's alpha estimate with values of 0.7 and above indicating high internal consistency. All tests of significance were pegged at 0.05 alpha level, 95% confidence limits.

The estimated sample size computed based on a correlation coefficient of 0.91 to detect positive and negative attitudes, alpha of 0.05 and a standard error rate of 5% was 125 subjects.

RESULTS

A total of 60 parents with their asthmatic children were included in this survey (See Table 1). The patient's average age was 6.6 years (range 3-19) with slight female predominance (67% vs 33%). Majority had family history of bronchial asthma (62%) while 20% had a history of both asthma and allergy in the family, while it was unremarkable in nine patients (14%). Most children had only bronchial asthma (65%) while twenty-one subjects had both asthma and allergy (35%). Upper respiratory tract infection for the past two weeks was documented in 36 subjects (60%).

Skin allergy was most common (33%). Common medications employed include bronchodilators (63%), long-acting β2 agonists (8%) and steroids in 5%. Mostly mothers were interviewed (98%), with an average of 34 years old, had finished college (56%), earning an average monthly income of more than 10,000 pesos (42%).

Parental Knowledge Regarding Childhood Asthma. In this domain, all parents were aware that bronchial asthma is a disease of both adults and children. However, only 60% knew that asthma cannot be prevented by vaccination and that it is not contagious (77%) and is not caused by any microorganism (68%). (Table 2).

Majority of parents knew that asthma can lead to death if uncontrolled (93%), symptoms may persist if uncontrolled (98%), while all knew that non-adherence to the treatment regimen is detrimental. Majority knew the signs of an impending attack (90%) as well as distinguish the danger signs (97%).

Only half of the parents (50%) were fully aware of the distinction between "relieving" drugs from "controlling" drugs.

Parental Attitudes Towards Childhood Asthma. Majority (90%) were still anxious about involving their kids to rigorous physical activity for fear of precipitating an attack, while more than half (58%) prohibit them to go outdoor. (Table-3)

Table 1. Profile of Children and Parent- Respondents, Validation of A 30-Item Questionnaire on Asthma Knowledge, Attitudes and Practices (PHC, 2009)

Variables	Mean ± SD or frequency (%) n= 60
Child's age in years	6.6 ± 3.4
Sex (Male:Female)	20:40 (33:67)
Family History	
Asthma	37 (62)
Asthma & Allergy	12 (20)
Allergy & sinusitis	1 (2)
Sinusitis	1 (2)
Past Medical History	
Asthma	39 (65)
Asthma & allergy	21 (35)
Upper respiratory tract	36 (60)
Specific Allergies	
Skin	7 (33)
Nasal	5 (24)
Food	4 (19)
Food and skin	3 (14)
Food, nasal, skin	1 (5)
Others	1 (5)
Medications	
Salbutamol	38 (63)
Salmeterol plus fluticasone	5 (8)
Steroids	3 (5)
Others	12 (24)
Parent's age (Years)	34 ± 6.7
Parent's Sex (male:female)	1:58 (2:98)
Educational Attainment	
Elementary	4 (7)
High school	22 (37)
College	34 (56)
Monthly Income (PHP)	
< 5,000	4 (7)
5,000-7,000	11 (18)
7,000-10,000	20 (33)
>10,000	25 (42)

All parents felt that they were confident when symptoms were achieved if they sought early

Table 2. General Responses to Knowledge Assessment, Validation of A 30-Item Questionnaire on Asthma Knowledge, Attitudes and Practices, (PHC, 2009)

Knowledge Domain	Domain Item	Total Subscale Items	Affirmative Response Frequency, (%)
Overall Nature of Asthma		4	
A non-contagious condition	Q1		46 (77)*
Not caused by bacteria	Q13		41 (68)*
It cannot be prevented by vaccination	Q 4		36 (60)*
A disease of infancy & adulthood	Q 7		60 (100)
Clinical Course of Asthma		5	
It can kill if severe	Q 10		56 (93)
Persistent symptoms if uncontrolled	Q 19		59 (98)
Drug non-compliance is detrimental	Q 25		60 (100)
Detection of an attack (e.g. wheezing)	Q 28		54 (90)
Danger signs in severe attacks	Q 22		58 (97)
Treatment Goals		3	
Symptom free and active	Q 16		59 (98)
Always be ready with medications	Q 6		58 (97)
Distinction of "relievers" from "controllers"	Q 27		30 (50)
Total Items		12	

*Negatively phrased and scored

Table 3. General Responses to Attitude Assessment, Validation of A 30-Item Questionnaire on Asthma Knowledge, Attitudes and Practices, (PHC, 2009)

Attitude Domain	Domain Item	Total Subscale Items	Affirmative Response Frequency, (%)
Anxious over common precipitating factors		2	
Vigorous exercise, sports	Q 2		54 (90)
Going outdoors	Q 5		35 (58)
Confidence gained if symptoms are controlled		4	
Achieved by seeking early consults	Q 8		60 (100)
Early institution of symptomatic relief	Q 23		60 (100)
Because asthma is not self-limiting	Q 26		54 (90)*
Child takes part in his/her management	Q 20		60 (100)
A positive outlook over the child's asthma		2	
Even during an attack	Q 29		60 (100)
Even during asymptomatic times	Q 17		60 (100)
A negative outlook over the child's asthma		2	
Inadequate therapy due to financial constraints	Q 11		56 (93)
If unable to perform activities of daily living	Q 14		58 (97)
Total Items		10	

*Negatively phrased and scored

Table 6. Internal Consistency for the Attitude Domain, Validation of A 30-Item Questionnaire on Asthma Knowledge, Attitudes and Practices, (PHC, 2009)

Attitude Domain	Significant Item Correlation	Rho p-value	Cronbach's Alpha
Anxious over common precipitating factors Vigorous exercise, sports Going outdoors	All items	r=.38, p<.001	0.55
Confidence gained if symptoms are controlled Achieved by seeking early consults Early institution of symptomatic relief Because asthma is not self-limiting Child takes part in his/her management	All items	0.99, p<.001	0.97
A positive outlook over the child's asthma Even during an attack Even during asymptomatic times	All items	0.89, p<.001	0.87
A negative outlook over the child's asthma Inadequate therapy due to financial constraints If unable to perform activities of daily living	All items	0.97, p<.001	0.86
Overall Reliability			0.91

* *Significant p-value if <.05

Table 7. Internal Consistency for the Practice Domain,, Validation of A 30-Item Questionnaire on Asthma Knowledge, Attitudes and Practices, (PHC, 2009)

Practice Domain	Significant Item Correlation	Rho p-value	Cronbach's Alpha
Preventing asthmatic attacks Contact from recognized triggers By enhancing prevention in the home Environmental modification measures By seeking more health education	All items	0.78, p<.001	0.79
Treatment during attacks Correct timing and drug- giving Seeking the doctor early Giving early treatment in mild symptoms Compliance to doctor's medication orders	All items	0.86, p<.001	0.82
Overall Reliability			0.92

* *Significant p-value if <.05

Table 8. Summary of Measures Internal Consistency for the Three Domains, Validation of A 30-Item Questionnaire on Asthma Knowledge, Attitudes and Practices (PHC, 2009)

Domain	Total Items	Cronbach's alpha
Knowledge	12	0.79
Attitudes	10	0.91
Practices	9	0.92
Over-all	31*	0.89

*One item was for both knowledge and practice

doctors' consultation, if they institute early asthma relief to their kids and if the kid takes active part in the management of his or her symptoms. In 54%, felt that confidence is gained simply because they knew that an asthma attack is not self-limiting and that they have to do something about it when it comes. All parents maintained a positive outlook despite the presence of symptoms as well as felt happy when their children are asymptomatic. A negative outlook was felt if they were unable to provide the adequate therapy during times of financial crisis (93%) and if they saw their children unable to play and perform independent activities of daily living (97%).

Parental Practices towards Childhood Asthma .In the key areas of asthma prevention, all parents were able to institute home measures, by modifying the home's environment, avoiding contact triggers like dust, pollen as well as seek more health education to prevent future attacks. (Table4) During asthmatic attacks, parents were able give the correct drug in the proper timing, seeking the doctor early on, instituting early treatment during the early onset of symptoms and adhering to the doctor's medication instructions always.

Reliability Testing by Intra-Class and Subscale Inter-Item Coefficients of Correlation. In the knowledge domain, the resultant measure of internal consistency or reliability was high in the overall nature or description of asthma as a disease (subscale- 1) and the treatment goals of asthma (subscale-3). The clinical course of asthma (subscale-2) had the lowest reliability. (Cronbach's=0.61). Significant inter-item correlations were noted with three question items in subscale 1. The overall reliability of the knowledge domain was high (Cronbach's alpha =0.79). (Table 5).

Attitude Domain. In the attitude domain, all item of subscale 2,3 and 4 had good internal consistency except for the first subscale on anxiety (Cronbach's alpha=0.55). The overall internal reliability of the attitude domain was nevertheless high (Cronbach's alpha=0.91). (Table 6)

*Practices of Asthma Management Domain.*In this domain, all subscale items were highly reliable and consistent . Reliability coefficient for questions pertaining to the treatment of asthma were much higher that compared to the preventive measures.(Cronbach's alpha=0.82 versus 0.79 respectively). The overall domain reliability was likewise high (Cronbach's alpha=0.92). (Table 7)

*Overall Internal Reliability of the Asthma Questionnaire.*Table-8 summarizes the internal consistency values of each domain. The resultant overall measure of internal consistency was high (Cronbach's alpha=0.89).

DISCUSSION

"Asthma is the most common chronic disease in childhood, yet the frequency with which this condition is recognized among school-aged children varies widely."[15] Raoul et al in 1999 has reported that it affects between 7% and 20% of children by 18 years of age. Studies have reported it as one of the more important reason for school absence, especially if the absence from school is greater than 5 days.[15] Patient education is one of the essential component of asthma prevention and control. Programs for these have been developed to "improve healthcare practices, reduce morbidity, and lower the cost of care."[9]

Asthma Pediatric Education Program is designed to increase the knowledge of parents of children with asthma about the cause, patho-physiology and management of asthma. Its aim is to increase not only compliance, but to increase the management skills of parents as well as of patients with asthma.

"Questionnaires are often administered to known asthmatics in an attempt to assess the impact of asthma on school attendance and performance."[15] Studies were done that developed and validated a school-based asthma screening questionnaire, which may provide a sensitive approach for detecting children with undiagnosed asthma.[15-16]

There were also studies done wherein questionnaires were developed and validated to measure asthma control[17-18] and knowledge on asthma triggers.[19- 20]These studies concluded that the "questionnaires are a reliable measure of asthma control and commonly perceived asthma triggers."[19] Subscales showed good internal consistencies and correlations. Juniper et al. developed the Asthma Quality of Life Questionnaire to measure the problems that adults with asthma experience in their day to day lives. They have shown that it has strong "evaluative and discriminative measurement properties."[21]

Asthma is an important health condition in the community we surveyed, ranking 6th in its leading causes of morbidity. In this study, the patients' average age was 6.6 (range = 3 – 19 years old). Majority had family history of bronchial asthma (62%). The mothers were mostly interviewed, with an average age of 34 years, had finished college and earning an average monthly income of more than 10,000 pesos. Social and economic factors are integral to understanding asthma and its care, as reported in GINA.[2] This study further emphasized the importance of asthma education to parents of asthmatic children. The questionnaire that we developed and validated in this study will be used to assess the knowledge, attitude and practices of parents of asthmatic children after attending the lectures on Asthma Pediatric Education Program and to help us assess its effectiveness in achieving quality health care. It was designed so that parents could complete it in a short time even without supervision. Although the questionnaire has less coverage in the pathophysiology and specific drugs used in asthma, it has adequate coverage on the relevant issues of the disease. Majority of pa-rents has adequate knowledge on how to prevent an attack and control the symptoms, but their attitude towards their children's asthma varies.

In the knowledge domain, the resultant measure of internal consistency or reliability is high in the overall nature or description of asthma as a disease (subscale 1) and the treatment goals of asthma (subscale 3). The high internal consistency or reliability of the subscale score may be due to the language used and its easy comprehensibility. The clinical course of asthma (subscale 2) had the lowest reliability (Cronbach's = 0.61). This may be attributed to the parents' lack of adequate knowledge or information on the subject. This limited knowledge may be increased through educational programs like the ASPEP. However, the overall reliability of the knowledge domain was high (Cronbach's = 0.79). In the attitude domain, all items of subscales 2, 3 and 4 had good internal consistency except for the first subscale on anxiety (Cronbach's = 0.55). This can be explained by the differing severity of the childhood asthma in the community we surveyed. It has been observed that the more severe the child's asthma, the more anxious the parents were. The overall internal reliability of the attitude domain was nevertheless high (Cronbach's = 0.91). In the practices domain, all subscale items were highly reliable and consistent. Reliability coefficient for questions pertaining to the treatment of asthma were much higher compared to the preventive measures (Cronbach's alpha = 0.82 versus 0.79, respectively). The overall domain reliability was likewise high (Cronbach's = 0.92). Subscales showed good internal consistency and correlations. The high internal consistency of the subscale scores may be due to its easy comprehensibility. The resultant overall measure of internal consistency was high in the study (Cronbach's alpha = 0.89).

CONCLUSION

In conclusion, this 30-item questionnaire is a valid, reliable and useful tool to measure the knowledge, attitudes and practices of parents ofasthmatic children. It is also a useful tool to as sess the knowledge, attitudes and practices of the parents of asthmatic children in the community to enhance and support the compliance in the management of asthma and assess the need for ntervention.

RECOMMENDATION

There is no gold standard for this questionnaire, so criterion validity, which scores on a particular instrument in relation to a reference standard, was not assessed. We recommend that a study be done using the questionnaire, with the patients categorized according to asthma severity.

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APPENDIX. VALIDATION OF A 30 – ITEM QUESTIONNAIRE ON ASTHMA KNOWLEDGE, ATTITUDES AND PRACTICES AMONG PARENTS OF CHILDREN WITH ASTHMA FOR THE ASTHMA PEDIATRIC EDUCATION PROGRAM OF THE PHILIPPINE HEART CENTER

	Lubos na sumasang-ayon	Sumasang-ayon	Di-Tiyak	Di Sumasang-ayon	Labis na di Sumasang-ayon
1. Ang hika ay isang sakit na nakakahawa					
2. Ako ay nangangamba na umatake ang hika kung sasali ang aking anak sa iba't-ibang uri ng ehersisyo at sports.					
3. Iniiwas ko ang aking anak sa "pollens", alikabok, balahibo ng hayop, ipis, usok ng sigarilyo, polusyon at ba pang sakit para maiwasan ang atake ng hika					
4. May bakuna laban sa hika.					
5. Natatakot akong palabasin ang aking anak dahil baka mahawa ito ng hika sa iba.					
6. . Ang regular ng pagbili ng gamot sa tamang panahon ay mahalaga upang maiwasan ang pag-atake ng hika.					
7. Ang hika ay sakit ng mga bata at matatanda.					
8. Ako ay naniniwala na malulunasan at makokontrol ang pag-atake ng hika kung susundin ko ang payo ng doctor.					
9. Pinapatingnan sa doctor ang aking anak upang hindi lumala ang hika.					
10. Ang hika ay nakakamatay.					
11. Dahil sa mataas na presyo, nangangamba ako na hindi maibigay ng wasto ang mga gamot para sa hika.					
12. Ang pag-atake ng hika ay maiiwasan kahit sa bahay lamang.					
13. Mikrobyo ang sanhi ng hika.					
14. Nalulungkot ako na hindi makapaglaro ang bata kung inatake siya ng hika.					
15. Binibigyan lunas ko ang bahagyang sintomas ng hika upang maiwasan ang pag-grabe nito.					

	Lubos na sumasang-ayon	Sumasang-ayon	Di-Tiyak	Di Sumasang-ayon	Labis na di Sumasang-ayon
16. Isa sa mga layunin sa pag-gagamot ng hika ay maging aktibo ang pasyente na walang nararamdamang sintomas.					
17. Natutuwa ako sa tuwing makikita ko ang aking anak na hindi inaatake ng hika.					
18. Lagi kong nililinis ang kapaligiran upang maiwasan ang pag-atake ng hika.					
19. Tuloy- tuloy ang sintomas kung ang hika ay grabe o hindi kontrolado.					
20. Gusto kong maging bahagi ang aking anak sa pangangalaga ng kanyang kalusugan upang makontrol ang hika.					
21. Lagi kong binibigyan ng tamang gamot ayon sa doctor ang aking anak upang malunasan ang sintomas ng hika.					
22. Isa sa mga palatandaan ng lumalalang hika ay kung ang labi o kuko ay nagkukulay asul o abo.					
23. Hindi ko ipinagwawalang bahala ang pag-atake ng hika dahil baka lumala ito.					
24. Dinadala ko agad sa doctor ang aking anak kapag umaatake ang hika.					
25. Ang hindi pag-sunod sa tamang paggamit ng mga gamot sa hika ay mapanganib.					
26. Hindi ko na kailangan bumili ng gamot para sa hika dahil kusa naming nawawala ito.					
27. Ang dalawang klase ng gamot na ibinibigay ko sa aking anak ay gamot na pang-aksyon agad o “relievers” at gamot na pang-bantay alalay o “ controllers” .					
28. Lahat ng may hika ay nakararamdam ng pag-pito o paghuni ng dibdib.					
29. Gusto kong maging masaya ang aking anak kahit na mayroon siyang sumpong ng hika.					
30. Inaalam ko lagi ang mga paraan upang maiwasan o makontrol ang pag-atake ng hika.					